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# RELAXATION STRATEGIES WITH CHILDREN: QUIETING RESPONSE AND GUIDED FANTASY

BY

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Relaxation Strategies With Children: Quieting Response and Guided Fantasy" submitted by Barbara Dunnigan in partial fulfilment of the requirements for the degree of Master of Education.

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## ABSTRACT

This study was designed to evaluate the efficacy of relaxation strategies with children. More specifically, the author set out to compare the relative effectiveness of quieting response training and guided fantasy training for the purpose of general relaxation, as measured by the temperature changes of the middle finger in Kindergarten subjects.

30 male and 30 female subjects were randomly selected from the 96 Kindergarten students attending an elementary school in a city of approximately 600,000 residents in northern Alberta. Subjects were assigned to one of the following groups: Experimental group 1, which received quieting response training, experimental group 2, which received guided fantasy training, and group 3 (control), which received no relaxation training.

Each of the subjects individually participated in one orientation session, one pretreatment session, nine treatment sessions, and two post-treatment sessions all of approximately 15 minutes duration. With the exception of the second post-treatment session, which was conducted one week after the first post-treatment session, the sessions were scheduled for twelve consecutive school days for each subject. All sessions comprised an initial phase of subject preparation, followed by a measuring and recording phase, of approximately

10 minutes duration. Finger temperatures were recorded, in degrees Fahrenheit, during the pretreatment and post-treatment sessions.

The findings of this study supported the basic hypothesis that guided fantasy relaxation training is a more effective type of relaxation training for children than relaxation training based on the quieting response techniques. During both post-treatment sessions, a one way analysis of variance indicated significance at the .01 level. The guided fantasy group exhibited significantly higher finger temperatures than the quieting response and the control groups. The findings were interpreted and implications for further research were discussed.

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TABLE OF CONTENTS


| CHAPTER | PAGE |
|---|---|
| I INTRODUCTION | 1 |
| Children and Stress | 1 |
| Relaxation Training | 2 |
| Relaxation Training as a Preventive Measure | 5 |
| Relaxation Training Strategies | 6 |
| Quieting response relaxation training | 7 |
| Guided fantasy relaxation training | 10 |
| The Problem | 13 |
| II REVIEW OF THE RELATED LITERATURE | 15 |
| Nature of Stress | 15 |
| Stress and Physiological Arousal | 17 |
| Fight-or-flight response | 17 |
| Dysponesis | 19 |
| General adaptation syndrome | 20 |
| Measurement of Stress and Relaxation | 21 |
| Quieting Response, Guided Fantasy, and Stress Reduction | 22 |
| Hypotheses | 26 |
| III DESIGN AND PROCEDURE | 28 |
| Sample | 28 |
| Procedure | 28 |

CHAPTER PAGE

Orientation session ..... 30

Pretreatment session ..... 31

Treatment sessions ..... 32

Post-treatment sessions ..... 33

Instrumentation ..... 34

Temperature recording and scoring equipment ..... 34

IV FINDINGS AND CONCLUSIONS ..... 36

Hypothesis 1 ..... 40

Findings ..... 40

Conclusion ..... 40

Hypothesis 2 ..... 40

Findings ..... 40

Conclusion ..... 40

Hypothesis 3 ..... 41

Findings ..... 41

Conclusion ..... 41

Hypothesis 4 ..... 41

Findings ..... 41

Conclusion ..... 43

Conclusions ..... 43

V DISCUSSION AND IMPLICATIONS ..... 45

Discussion ..... 45

CHAPTER PAGE

Quieting response relaxation training as an effective strategy for children ..... 46

Guided fantasty relaxation training as an effective strategy for children ..... 49

Implications ..... 50

Research implications ..... 50

Educational implications ..... 51

BIBLIOGRAPHY ..... 52

APPENDICES ..... 60

A. Transcript of No Relaxation Training Tape Recording ..... 60

B. Quieting Response Training Tape Recording Reference ..... 60

C. Guided Fantasy Training Tape Recording Reference ..... 60

D. Children's Stories References ..... 60

## LIST OF TABLES


| Table | Description | Page |
|---|---|---|
| 1 | Summary of Pretreatment Data (F°) | 36 |
| 2 | Pretreatment Analysis of Variance | 37 |
| 3 | Summary of First Post-Treatment Data (F°) | 38 |
| 4 | First Post-Treatment Analysis of Variance | 38 |
| 5 | Summary of Differences Between Paired Group Means | 39 |
| 6 | Summary of Second Post-Treatment Data (F°) | 42 |
| 7 | Second Post-Treatment Analysis of Variance | 42 |

# CHAPTER I

# INTRODUCTION

## Children and Stress

Stress is usually perceived mainly as a concern of the adult population. However, undesirable stress can also have a devastating effect on young children. Children are not immune to stress and stress-related disorders. A recent study by the American Health Foundation found that "71 percent of 205 Washington children ages 5 to 13 had at least one major stress-related risk factor for later disease such as high blood pressure or high cholestrol" (Mamone, 1983, p. D2). Evidence of physiological stress generally begins to appear as children encounter the discipline, restriction, and pressure of parental expectations which accompany the starting of school (Stroebel & Stroebel, 1984a). The educational setting, itself, places pressures on the children because of its competitive milieu. (Engelhardt, 1978; Green, 1984; Hughes & Collins, 1978; Stroebel & Stroebel, 1984a). "School anxiety as a child stressor is a phenomenon with which educators, particularly counselors and teachers, frequently find themselves confronted in dealing with children" (Humphrey & Humphrey, 1981, p. 49). One of the problems for children is that they do not have the

readily available options that adults might have and, therefore, are not likely to be as able to cope with stress as adults (Green, 1984).

A small amount of literature has been concerned directly with children and stress. However, this literature indicates that children seem to learn self-regulatory behaviors for dealing with stress, and are able to master relaxation techniques much more rapidly than do adults (Green, 1984; Pelletier, 1977; Peper & Grossman, 1974; Stroebel & Stroebel, 1984b). The purpose of this study is to teach young children relaxation strategies which can extend their repertoire of coping skills.

Relaxation Training

Relaxation training refers to procedures designed to enable individuals to voluntarily achieve low levels of arousal. It is both a way of controlling existing symptoms and preventing further difficulties. In psychotherapy, where relaxation training is most commonly applied to anxiety reduction, Haugen, Dixon, and Dickel (1958), Jacobson (1970), Mischel (1968), Payne (1970), Schultz and Luthe (1959) and Wolpe (1958, 1969) are among the many investigators who have provided evidence of the therapeutic effects of relaxation training.

Although there are many forms of relaxation training, the three most common techniques include progressive relaxation, autogenic training, and biofeedback training. Jacobson (1970) introduced a form of therapy known as progressive relaxation in 1929. This relaxation therapy involved an "extreme degree of relaxation which was a systematic, progressively cultivated form of muscle relaxation" (p. 71). This technique is based on the procedure of comparing the difference between the sensation of muscular tension and that of muscular relaxation. Jacobson referred to this as "muscle sense". Jacobson (1970) claims that progressive relaxation is generally effective, as a relaxation training technique, for both adults and children. A review of the literature indicates that versions of Jacobson's progressive relaxation are the most widely used forms of relaxation training (Bernstein & Borkovec, 1973; Brown, 1974; Rachman, 1968; Volpe, 1975).

Preceding the development of progressive relaxation, Schultz devised an independent formulation of a relaxation-based therapy called autogenic training. This type of relaxation became popularized by Green, Green, and Walters in 1970 with their use of Schultz and Luthe's (1959) autogenic training. It entailed suggestions of warmth and heaviness. With this training, the individual was able to achieve a deep state of psychophysiological relaxation through passive mental control

of the neuromuscular and autonomic systems (Schultz & Luthe, 1959). Autogenic training employs aspects of hypnosis, psychoanalysis, and yoga (Lindeman, 1971; Schultz & Luthe, 1959). It is generally effective with adults, but appears to be of limited use with respect to children (Schultz & Luthe, 1959). Behavior therapists have developed similar techniques such as emotive imagery, rehearsal, and cognizing (Volpe, 1975). Although progressive relaxation and autogenic training have been successful, the programs are long and time-consuming (Bernstein & Borkovec, 1973).

Biofeedback has also become popular in the treatment of stress-related disorders. As Miller (1974) indicates, biofeedback is "the use of... modern instrumentation to give a person better moment-to-moment information about a specific physiologic process that is under the control of the nervous system but not clearly or accurately perceived" (p. 684). The new technology of biofeedback made it possible to shorten the time required for relaxation training. Biofeedback general relaxation training techniques are designed to enable individuals to achieve, at will, a state of psychological and physiological calm (Budzynski & Stoyva, 1972). Electromyographic (EMG) feedback and thermal feedback are the most popular forms of biofeedback to be used in clinical and research settings, with both adults and children. Some

therapists believe that biofeedback training in the early years provides subsequent protection against emotional and psychosomatic disorders (Brown, 1974; Englehardt, 1978; Luce & Peper, 1971; Volpe, 1975). The difficulty with using biofeedback techniques in the classroom is the cost and cumbersome nature of the equipment (Stroebel & Stroebel, 1984a).

Relaxation Training as a Preventive Measure

Using relaxation training as a preventive measure has become increasingly popular. Haugen et. al. (1958) suggest that the incidence of anxiety reactions would be reduced if healthy, normal children were taught the principles of relaxation. Budzynski (1973) emphasizes the importance of early training in the relaxation area. He believes it could prove to be a valuable contribution towards prevention of later problems and a feasible adjunct to the school curriculum. Humphrey and Humphrey (1981) also believe that children should be taught to manage stress in order to prevent stress-related illnesses in their adult years. Effective prevention of stress may be best accomplished by relaxation training which is an economical, easily taught technique that children can master (Humphrey & Humphrey, 1981). Although these authors infer that relaxation in the normal classroom may be conceived as preventive

medicine and an excellent addition to the children's education, there is little evidence regarding the effects of such early training.

Previous programs stressing the acquisition of relaxation skills as preventive medicine in the elementary classroom (Engelhardt, 1978; Hughes & Collins, 1978; Stroebel & Stroebel, 1984a; Wilkinson, 1976; Wilkinson 1980), have proven to be successful in enhancing relaxation, although the long term effects of this training have not been evaluated. In addition, there is little empirical evidence regarding the relative effectiveness of different types of relaxation training with children.

## Relaxation Training Strategies

Various relaxation training strategies may serve to develop alternative means for coping with stress and anxiety. There is an increasing use of these strategies in research and practice (Davidson & Schwartz, 1976). Most procedures designed to achieve a state of relaxation have very similar effects, both physiologically and psychologically. It is mainly the methods of attaining the relaxation that differ (Pelletier, 1977). The focus of these strategies is to develop the individual's ability to shift readily into a relaxed, low-arousal condition, with the self-regulation of muscular and autonomic

activity (Stoyva, 1978). The ability to initiate this state, at will, is the ultimate aim, so as to counter the effects of the fight-or-flight response (see Chapter II) by substituting the low arousal state in response to a stressor (Budzynski, 1973; Pelletier, 1977; Stroebel, 1982). In considering any strategy that is designed to accomplish relaxation, one must realize that learning to relax is a skill.

Certain strategies such as the quieting response, progressive relaxation, and visual imagery are shown to be effective in training children to relax (Lupin, 1977; Luthe, 1969; Stroebel, 1982). The relaxation strategies chosen for discussion are those used within the present study. These strategies are readily available to teachers or counselors and are presently used in many classroom settings as affective education programs. They are geared toward the young child and use simplistic language and child-oriented imagery. These programs are easy and appealing to the young child. They take only a short period of time each day and require very little supervision (Engelhardt, 1978).

Quieting response relaxation training. The quieting response (QR) concept was discovered by Charles Stroebel in 1974. It was an outgrowth of his work with an outpatient clinic population. The quieting response was designed to help adults with stress-related disorders to relax and automatically

adjust arousal levels up or down to meet the actual stress at hand (Stroebel & Stroebel, 1984a). This quieting response concept involves the principles of increased discrimination of arousal cues and dysponesis. It uses elements of progressive relaxation, autogenic training, and rational emotive therapy (Stroebel, 1982). The quieting response concept aids in achieving an inner balance of the body, or as Cannon (1936) labelled it, "adaptive homeostasis."

The quieting response is a six-second response used to diffuse the potential buildup of arousal. The quieting response can interrupt the emergency reaction by creating a six-second pause during which individuals can decide whether or not to activate their body (Stroebel, 1982). The six steps of the initial six seconds of the emergency response are sympathetic nervous system outflow, secretion of the adrenaline, increase in tension in the facial muscles, a catch or holding in the breathing pattern, restriction in blood flow to the hands, feet, and intestines, and a clenching of the jaws (Benson, 1975; Cannon, 1936), which are respectively counteracted by the quieting response.

With much practice, it was believed that the quieting response became automatic, a quieting reflex. Charles Stroebel's work with the quieting response led to the hypothesis that it is an inborn trait like the emergency

response. Studies are currently being conducted in this area. Previous research indicated that after six months of practice, patients improved their ability to avoid and lessen stress illnesses (Ford, Stroebel, Strong, and Szarek, 1982, 1983). The quieting response has proven to be of significant value in managing stress problems in adults (Stroebel, 1982).

Elizabeth Stroebel began work with Kiddie QR in 1980 (Stroebel, Stroebel, & Holland, 1980) when she saw the effectiveness of biofeedback techniques with children and decided it could be translated into daily stress management techniques. As previously mentioned, biofeedback equipment can be costly and cumbersome in the classroom and, thus, Stroebel attempted to teach children the six-second quieting response strategy as an alternative (personal communication, 1985).

The quieting response training for children, Kiddie QR, teaches children to discriminate between body arousal states. The children learn that they have the choice and the ability to control the fight-or-flight response. Children learn to shift body gears before difficult tasks, unpleasant situations, or fights overtake their bodies. The program uses child-oriented imagery and metaphors to accomplish the objective of developing a hierarchy of behaviors which are incompatible with the emergency response (Stroebel, 1982).

Elizabeth Stroebel states that children in the Kiddie QR program "develop coping strategies which can integrate negative stressful aspects of their lives with the positive stresses experienced by all healthy individuals" (Stroebel & Stroebel, 1984a, p. 7); they build their "very own good feeling self."

The Kiddie QR program has been incorporated into the curricula of many of the school systems throughout the United States and Canada. After using the quieting response program in fifteen elementary schools within the Arizona public school system, a research study indicated that "productivity on task behavior, concentration, performance in spelling and math all showed gains (Duncan, 1983, p.1)." Duncan (1983) also reported that teachers found a definite decrease in unacceptable behavior on the playground. The program enhanced the children's self control. They could recognize stress and deal with it effectively.

Guided fantasy relaxation training. Within the Developing Understanding of Self and Others (DUSO), revised kit (Dinkmeyer & Dinkmeyer, 1982), there is a series of guided fantasy activities developed by St. Thomas. These guided fantasy activities involve a relaxation training exercise, which has been based on Jacobson's progressive relaxation, and a guided experience into a secret place called Aquatron.

Following the fantasy, the children are asked to draw pictures of what they imagined while on their adventure.

St. Thomas uses guided fantasy in most of his therapeutic work. He believes that fantasy encourages children to be spontaneous, creative, and imaginative (personal communication, 1985). These guided fantasy activities are similar to Wolpe's (1958) systematic desensitization model which involves progressive relaxation linked with fearful stimuli. Rachman's (1968) contention is that if fearful imagery can create a state of arousal and tension, then mental calmness or relaxing imagery can create a state of relaxation.

In order to relax, children must have a quiet mind and a quiet body (Jacobson, 1938). Progressive relaxation produces a physical relaxation, while pleasant imagery can produce mental relaxation. With these two factors incoporated into the DUSO guided fantasy procedure, the program can provide the desired effects of subjective pleasantness, focused attention, and lowered physiological arousal (Bernstein & Borkovec, 1973).

The relaxation exercise requires the children to tense and relax various muscle groups to help them become aware of, and to control, very small changes in muscle tension levels. The sequence begins at the feet and continues up the body. The goal of progressive relaxation training is to learn to recognize and

reduce tension during daily activities as well as during the relaxation sessions. The tensing procedure makes a vivid contrast between tension and relaxation and thus allows the subject to directly perceive and compare the two, and to appreciate the difference in feeling associated with each of these states (Bernstein & Borkovec, 1973). When the whole body has been tensed and relaxed, the child imagines himself "floating free and relaxed" and lets his "mind wander." At this point a fantasy is presented to the child. The fantasy involves the process of closing one's eyes and imaging a pleasant picture of things, events, or feelings. Danskin and Crow (1981) suggest that images can bring feelings of relaxation or contentment, or tension, frustration, and anxiety.

Brown (1980) states that "images are used to solve problems or to gain relief from mind pressures by fantasy" (p. 247). Two effects of imagery, which have been scientifically validated, are (1) the more specific the image, the more specific the physical effect and (2) the effect of a mental image is to cause an expenditure of physical energy. Imagery determines the physiologic activity of the body and the brain (Brown, 1980). According to Maltz, "our brain and nervous system cannot tell the difference between something that is a real experience and one that is vividly imagined" (Lupin, 1977, p. 44). Maltz uses imagery to eliminate negative emotions

caused by aggressiveness, frustration, insecurity, or resentment. Negative ideas and emotions interfere with the programming of the body. Green and Green (1978) believe that instead of fighting negative thoughts, one should merely replace them with positive ones. Replacing negative imagery with positive imagery will have a calming effect on the body, which leads to the state of deep relaxation.

The effects of imagination were first demonstrated by Jacobson (1938). Using primitive equipment, Jacobson demonstrated that an increase in muscle action-potentials had been initiated through imaging the lifting of a ten pound weight. This was detected by the instrumentation which measured electrical impulse fluctuations. Imagery activates the muscle action-potentials in a way similar to the actual experience, with the exception of the magnitude of the response.

## The Problem

In view of the fact that relaxation strategies are becoming increasingly popular in the treatment of stress-related disorders and as preventive measures with children, there appears to be a need to determine the relative effectiveness of different relaxation strategies with young children. It can be seen as a prerequisite to an investigation which would

determine the long term effects of early training in relaxation skills. More specifically, this study will compare quieting response training and guided fantasy training for the purpose of general relaxation with Kindergarten children.

# CHAPTER II

## REVIEW OF THE RELATED LITERATURE

### Nature of Stress

Stress is an everyday fact of life and it has become one of the most serious problems of the twentieth century. A recent estimate suggests that up to 70% of all medical complaints are stress related (Stroebel & Stroebel, 1984b). According to Selye (1974) stress cannot and should not be avoided, but should be used productively to enhance our lives. Some stress is essential to life. However, if handled improperly, stress can lead to distress with resulting tension and anxiety. While there is an obvious lack of consensus regarding the nature of stress (Seyle, 1974), it is generally agreed that stress is both psychological and physiological in nature. Some theories are concerned with the origins of emotional reactions to stress; other theories give attention to the physiologic changes in the body when stress occurs, while most theories do not deal with the nature of stress itself (Brown, 1980).

Selye described stress as the "nonspecific response of the body to any demand" (1974, p. 14). This definition of stress, which has been widely accepted, involves a mobilization of the bodily resources in response to some sort of stimulus. Stress

is accompanied by heightened physiological arousal, or a shift toward dominance of the sympathetic nervous system (Budzynski, 1973; Stoyva & Budzynski, 1974) and the activation of the endocrine systems, thus, producing the associated physiologic changes. Seyle's stress theory describes the physiological, biochemical, and immune system reactions to physical stress via his description of the General Adaptation Syndrome. He does not, however, deal with psychological or social stress. Recently the nonspecific nature of stress has been questioned by Mason (1976), who suggests that psychological stressors activate endocrine systems other than those activated by physiological stressors. Brown (1980) states that there is a general belief that "stress somehow excites the instinctual body mechanisms used to defend the physical organism" (p. 89). This does not, however, account for the psychological, social, or economic sources of stress. Modern medicine and psychology are hesitant to explore how physical effects can be caused by "mental" events. Brown (1980) outlined four distinctive qualities of stress. Firstly, it is nonphysical. Except for physical stress, stress is the result of a conflict in one's interaction with people or the environment. Secondly, stress is always associated with events in the social environment. Thirdly, things in the social environment are not, in themselves, stressful. Fourthly,

according to Brown the most important characteristic of "stress as a cause of illness is that it is the only cause of illness that requires activation and energizing by mental processes" (p. 90).

Stress and Physiological Arousal

Stress is associated with certain physiological responses which are incompatible with others (Haugen et al., 1958; Jacobson, 1967; Schultz & Luthe, 1959). It is the interaction between the sympathetic and parasympathetic divisions of the autonomic nervous system that is important in the physiology of both stress and relaxation. As previously indicated, heightened physiological arousal entails a shift toward dominance of the sympathetic division of the autonomic nervous system. A shift toward parasympathetic dominance is a counteraction against excessive stress. It brings the body back to a healthy balance. This response was termed the "relaxation response" by Benson (1975). While the parasympathetic system is primarily an energy-conserving system, the sympathetic system tends to promote energy expenditure by mobilizing the body to meet emergencies.

Fight-or-flight response. The physiological concomitants of stress and anxiety have been variously termed the "emergency reaction" (Cannon, 1914), the "ergotropic

reactions" (Hess, 1954), the "defense reaction" (Abrahams, Hilton, & Zbrozyna, 1960), and most commonly , the "fight or flight response" (Benson, 1975). When the fight-or-flight response is evoked, the organism prepares for action by mobilizing the bodily resources to protect itself from the demands placed upon it. The organism gears up for confrontation or escape. This initial alarm reaction is a basic hereditary mechanism designed for survival on an automatic level. It was necessary for prehistoric man to quickly mobilize for survival purposes. In modern times, most of the stressors are psychological in nature and thus, this reaction is inappropriate in most situations. Our bodies, however, still react in the same way as did our ancestor's bodies. Martin (1961) suggests that although the emergency reaction "may be largely innate...it is likely that as a result of learning or constitutional predisposition individuals tend to have variations in the manner in which the...reaction is expressed" (p. 234). Although all individuals do not always react in the same way physiologically to stress, there are generalized body reactions (Humphrey & Humphrey 1981). When people are stressed, an involuntary response increases their blood pressure, heart rate, rate of breathing, blood flow to the muscles, and metabolism, as the organism is gearing up for confrontation or escape. Once this neurophysiological stress

response has been completed, the body rebounds into a state of deep relaxation and ultimately towards homeostasis, as the sympathetic nervous system activity subsides (Pelletier, 1977).

Homeostasis implies a balance of all systems in the body that are necessary for life. It is the ability to automatically readjust, or adapt to restore balance when we become unbalanced due to excessive or inappropriate stresses (Miller, 1974). Cannon (1936) first introduced this term to describe the body's intrinsic inner balance.

Dysponesis. As previously mentioned, inappropriate reactions to stress can seriously effect the well-being of the organism. Whatmore and Kohli (1968) coined the term "dysponesis" to describe such reactions. Dysponesis is a "physiopathologic state made up of errors in energy expenditure within the nervous-system" (Whatmore & Kohli, 1968, p. 103). More simply stated, it is faulty muscle tension. Most people respond to pressure with increased muscle tension called "bracing." Bracing is the act of preparing the important action muscles for the decision to move or stand by in order to avoid unpleasant situations (Brown, 1977). Modern equipment and body chemical analysis have shown that bracing produces autonomic changes. It raises the level of arousal of the body and increases excitability of the limbic system which gives

rise to acute or chronic anxiety (Jacobson, 1938; Whatmore & Kohli, 1968). Dysponesis leads to an exaggeration of appropriate fear responses. Misdirected bracing efforts operate to the person's detriment. Whatmore and Kohli (1974) indicate that although bracing efforts may be fitting in some threatening situations, they are inappropriate in meeting most psychological stresses.

General adaptation syndrome. Selye (1974), in describing what he termed the "General Adaptation Syndrome", outlined the effects of prolonged stress on the organism. The general adaptation syndrome is divided into three stages. The first stage is the alarm reaction, where the body is exposed to a stressor and displays physiological changes which are characteristic of the fight-or-flight response. There is the appearance of acute manifestations. The second stage is that of resistance, which ensues if there is continued exposure to the stressor. No person can be maintained in a state of alarm. The body must adapt if survival is possible. During this stage, adaptive energy is expended to return the body to its normal balance in terms of structural and chemical changes (Selye, 1974). The third and final stage, is that of exhaustion. During this stage the organism is incapable of survival at normal resistance levels, and death follows. The stage of exhaustion is reversible if the demand upon the body is only temporary.

However, the complete exhaustion of all stores of adaptation energy is not reversible. Adaptability is finite. As adaptation energy is consumed by life's stresses, one must learn how to make this valuable asset last longer by using it wisely and sparingly.

Measurement of Stress and Relaxation

As previously indicated, certain physiological changes are associated with stress and relaxation. These changes can be measured by recording the skin temperature. The cardiovascular mechanisms which regulate skin temperature in the hands and feet are closely linked with the activity of the sympathetic division of the autonomic nervous system (Suter & Loughry-Machado, 1979). An increase of sympathetic activity causes vasoconstriction which reduces blood flow and is reflected in the cooling of the skin. Decreases of skin temperature are associated with increases in anxiety. Conversely, relaxation of the smooth muscles surrounding the peripheral blood vessels, vasodilation, is accompanied by the decrease in sympathetic activity reflected in the warming of the skin and is associated with a decrease in anxiety.

To achieve a greater control in the measurement of relaxation and tension an "independent objective index" should be used to verify the subject's self-report of relaxation

(Budzynski, 1973). When subjective measures are used, the results may not accurately measure the physiological state of the subject. Budzynski (1973), through the use of biofeedback instrumentation, found that subjects were often unaware of their muscular tension or relaxation. The measurement of skin temperature as an objective index in recording physiological changes has been widely practiced (Hartje & Moe, 1984; Suter & Loughry-Machado, 1979).

Quieting Response, Guided Fantasy, and Stress Reduction

In terms of stress reduction the strategies of quieting response, progressive relaxation, and visual imagery have been proven to be effective (Lupin, 1977; Luthe, 1969; Stroebel, 1982).

Research indicates that the quieting response has proven to be successful in managing stress-related problems in adults (Ford, Stroebel, Strong, and Szarek, 1981, 1982, 1983; Stroebel, 1982). One study was designed to evaluate the quieting response training for alleviation of headaches with patients. It was found that the quieting response was most effective for treating primary idiopathic Raynaud's disease and vascular headache, particularly classic migraine in the adult population (Ford, Stroebel, Strong, and Szarek, 1981). Ford, Stroebel, Strong, and Szarek (1982) also found that the critical

factors in predicting the success of adults in the quieting response program were dedication, discipline, and motivation.

Some of the studies based on Kiddie QR have been successful. Duncan (1983) discovered gains in terms of academic behavior and appropriate playground behavior. According to Balog (1983) asthmatic children have learned to reduce their attacks with the quieting response. Fisher and Peper (1984) showed an increase in students' attention spans and a decrease in disturbing aggressive behavior. The authors initiated strategies by which the children could participate more actively in developing their own individualized imagery as an adjuvant technique to Kiddie QR. The Kiddie QR Program has been compared with Lupin's program (1977) Peace, Harmony, and Awareness (Bristowe, 1982; Matthews & Casteel, 1984). These comparative studies, however, have shown that training did not produce any significant effects. In reviewing the literature, there appears to be a need for some assessment as to whether the child has internalized and can apply the concepts of Kiddie QR. Some children work easily with abstractions (metaphors and images), while others deal more effectively with the concrete (Green, 1984).

There have been no studies in terms of stress reduction involving DUSO's guided fantasy training. Therefore, each of the components, progressive relaxation and imagery,

will be explored.

Progressive relaxation has been a major component in the treatment of systematic desensitization (Paul, 1969; Rachman, 1968), moderate hypertension (Blanchard, Andrasik, McCoy, Acerra, Pallmeyer, Gerardi, & Halpern, 1984), childhood headaches (Andrasik, Blanchard, Attanasio, & Burke, 1983), stress reduction (Bradley & McCanne, 1979), and insomnia (Borkovec & Fowles, 1973). It has become one of the most widely used forms of relaxation training. Significant physiological changes are associated with progressive relaxation such as reduction in muscular tension (Bernstein & Borkovec, 1973).

Jacobson (1967) illustrated that images are powerful excitants of the body's physiologic system. Mental images determine the physiologic activity of both the body and the brain (Brown, 1980). A number of researchers report success in using imagery as an aspect of relaxation training with children (Humphrey & Humphrey, 1981). Kanfer and Goldstein (1975) found success with hyperactive and impulsive children in their work on self-instructional training. Schneider and Robin (1974) used imagery in the development of a self-control program. They developed the technique of training disruptive children to have impulse control by pairing imagery and relaxation. Fisher and Peper (1984) concluded in their

research that one should help facilitate the young child to generate individualized imagery. Schandler, Dana, Chambers, and Sloan (1979) discovered that guided imagery was associated with "consistent physiological tension reduction along with comparatively larger reductions in the requisite tension behavior of hostility" (p. 32).

When these two components, progressive relaxation and imagery, are combined in general relaxation training, the result is a quiet mind and a quiet body (Green, 1984; Jacobson, 1967). However, there are no studies at this time which make a direct comparison between quieting response training and guided fantasy training in terms of general relaxation with either adults or children. In the absence of research, one might speculate that the guided fantasy training would be more effective with the young child. Firstly, guided fantasy training uses more concrete images than the quieting response training. Young children move from the concrete to the abstract (Bruner, 1964). Secondly, guided fantasy allows the children to continue imaging a scene on their own, whereas the quieting response training develops imagery where the children must put themselves into a specific contextual framework. Often the young child has not experienced these images before. Finally, from previous classroom work with Kindergarten children using the quieting response and guided fantasy, it

appears that for the younger child the Kiddie QR program is more difficult to understand. This was illustrated by a five-year old child who, when asked to do her QR, responded: "What's QR? QR's my body friend. How can I do him?"

Hypotheses

A number of hypotheses, including those delineated for empirical investigation in the present study, are suggested by the preceding discussion. The basic hypothesis to be tested, which subsumes the following specific hypotheses, is that guided fantasy relaxation training is a more effective type of relaxation training for young children than relaxation training based on the quieting response.

1. The quieting response group (1) will exhibit higher finger temperatures than the control group (3) after the treatment sessions.
2. The guided fantasy group (2) will exhibit higher finger temperatures than the control group (3) after the treatment sessions.
3. The guided fantasy group (2) will exhibit higher finger temperatures than the quieting response group (1) after the treatment sessions.
4. Both the quieting response group (1) and the guided fantasy group (2) will exhibit an increase in finger temperature

which will be maintained one week after the first post-treatment session.

# CHAPTER III

## DESIGN AND PROCEDURE

### Sample

Subjects for this study were drawn from the Kindergarten children attending an elementary school in a city of approximately 600,000 residents in northern Alberta. This Kindergarten student body comprised ninety-six children from which 30 males and 30 females were randomly selected and assigned to one of the following groups: Experimental group 1, which received quieting response training, experimental group 2, which received guided fantasy training, and group 3 (control group), which received no relaxation training. Parental permission for participation in the study, which was presented as a part of the Early Childhood program, was obtained for all subjects.

### Procedure

The 60 subjects participated, individually, in one orientation session, one pretreatment session, nine treatment sessions, and two post-treatment sessions, each of approximately 15 minutes duration. With the exception of the second post-treatment session, the sessions were scheduled

for twelve consecutive school days for each subject. Twelve subjects, four in each experimental group, entered the Relaxation Center per day. The second post-treatment session was scheduled one week after the first post-treatment session. The pretreatment session and the first and second post-treatment sessions occurred on the same day of the week. In addition, each subject entered the experiment at the same time period each day, in order to control for the possible effects of daily biological rhythms (Luce & Peper, 1971). All sessions were conducted in the Relaxation Center of the Kindergarten classroom, which was situated in a quiet corner and maintained at a constant temperature of 72°F (Autogenic Systems Incorporated, 1976b). This study was done in the children's classroom setting which may, according to Hughes and Collins (1978), increase the chances of the newly learned behavior integrating more smoothly into their repertoire.

All sessions comprised an initial phase of subject preparation, followed by a measuring and recording phase, or treatment phase, of 10 minutes duration. The subjects were in the classroom environment for at least thirty minutes prior to entering the experiment. During the subject preparation phase, each subject completed a simple ten piece puzzle (Numeral Inlays, 1976). The subject then reclined on a black, Kroken lo- ging-chair (Ikea, 1984) and was connected to a

thermometer (Autogen 2000). The temperature probe was attached to the palmer surface of the middle finger of the dominant hand (Hartje & Moe, 1984; Lynch, Hama, Kohn, & Miller, 1976; Suter & Loughry-Machado, 1979). The researcher previously noted the hand dominance of each subject through the observation of a coloring activity. In addition, the subjects wore adjustable earphones. Standardized, verbal instructions were used by the experimenter for each session. However, during the treatment sessions the verbal instructions were presented, using the experimenter's voice, in the form of tape recordings, in order to control for the amount of direct experimenter-subject interaction for the experimental and control groups. The recordings used in the treatment sessions were designed to be ten minutes in length.

During the measuring and recording phase of each session the average skin temperature was monitored and recorded. Each measurement period was of 60 seconds duration and was followed by a 15 seconds recording period. The data recorded during the pretreatment session was used to calculate the pretreatment baselines. It should be noted that the subjects were neither in a position to observe the readouts of the instruments, nor see the examiner recording the data.

Orientation session. At the beginning of the orientation session, which was designed to introduce the subjects to the

experimental situation, the experimenter instructed each subject as follows: "Hello X. Do you need to use the washroom before we start? I want you to take off your shoes and sit on this chair, while I measure how well you are relaxing. This is a thermometer, just like those you work with in the Science Center, and it will measure the temperature of your body. I'm going to put the thermometer on your finger. It won't hurt you at all. It is just used to tell how well you are relaxing." (Temperature probe attached.) "Keep your hand resting on your lap. Please do not touch the thermometer on your finger or allow it to touch anything else. Any questions? Are you comfortable? Now, just sit quietly and wait until I tell you that you have finished." (Put on earphones.) The subject then listened to the No Relaxation Training Tape Recording (See Appendix A). The measuring and recording phase of the orientation session entailed eight measuring periods of 60 seconds duration and eight recording periods of 15 seconds duration. Following this phase, and the removal of the probe, the subjects were asked to draw a picture of something they were thinking about. This procedure provided standardization across the sessions and groups.

Pretreatment session. Each subject was prepared for the measuring and recording phase of the pretreatment sessions as follows: "Hello X. Do you need to use the washroom before we

start? I want you to take off your shoes and sit on this chair, while I measure how well you are relaxing." (Temperature probe attached.) "Keep your hand resting on your lap. Please do not touch the thermometer on your finger or allow it to touch anything else. Any questions? Are you comfortable? Now, just sit quietly and wait until I tell you that you have finished." (Put on earphones.) The subject then listened to the No Relaxation Training Tape Recording. The measuring and recording phase of the pretreatment session entailed eight measuring periods of 60 seconds duration and eight recording periods of 15 seconds duration. Following this phase, and the removal of the probe, the subjects were asked to draw a picture of something they were thinking about.

Treatment sessions. Each subject was prepared for the treatment sessions as follows: "Hello X. Do you need to use the washroom before we start? I want you to take off your shoes and sit on this chair. Please pay attention to the tape I am going to play for you. Be sure to completely follow the instructions it gives you. Any questions? Are you comfortable? Now, just sit quietly and wait until the recording is finished." (Put on earphones.) The instructions given were in the form of tape recordings which varied according to group membership. Subjects in group 1 were instructed in quieting response relaxation training. (For

reference of Quieting Response Training Tape Recording, see Appendix B.) Subjects in group 2 were instructed in guided fantasy relaxation training. (For reference of Guided Fantasy Training Tape Recording, see Appendix C.) Group 3 subjects, the control group, received no relaxation training. The children in this group listened to taped children's stories. (For references of Children's Stories, see Appendix D.) All subjects were continually monitored to see if the directions were followed. Following the tape recording the subjects were asked to draw a picture of something they were thinking about.

Post-treatment sessions. At the beginning of each post-treatment session, the subjects received the following instructions: "Hello X. Do you need to use the washroom before we start? -I want you to take off your shoes and sit on this chair, while I measure how well you are relaxing. I'm going to put the thermometer on your finger. It is used to tell how well you are relaxing." (Temperature probe attached.) "Keep your hand resting on your lap. Please do not touch the thermometer on your finger or allow it to touch anything else. Start from where you are now, using any skills that you may have learned during the previous sessions. Any questions? Are you comfortable? Now, just sit quietly and wait until I tell you that you have finished." (Earphones put on.) The subject listened to the No Relaxation Training Tape Recording. The

measuring and recording phase of the post-treatment session entailed eight measuring periods of 60 seconds duration and eight recording periods of 15 seconds duration. Following the measuring and recording phase of each post-treatment session, and the removal of the thermistor, the subjects drew a picture of something they were thinking about.

Instrumentation

The recording of hand temperature is a primary tool for measuring general relaxation training. The most common site for the thermometer is the middle finger of the dominant hand (Hartje & Moe, 1984; Lynch, Hama, Kohn, & Miller, 1976; Suter & Loughry-Machado, 1979). There appears to be a clear relationship between the decrease of fingertip temperature and increased anxiety as reported by Hartje and Farrar (1984) and Russell (1972).

Temperature recording and scoring equipment. The Autogenic Systems Incorporated (ASI) Autogen 2000 feedback thermometer was used, in conjunction with the Autogen 5100 digital integrator, to measure temperature changes of the middle finger of the dominant hand (Hartje & Moe, 1984; Lynch, Hama, Kohn, & Miller, 1976; Suter & Loughry-Machado, 1979). The Autogen 2000 feedback thermometer is capable of accurately registering temperature changes of .02°F.

Incorporated into the thermometer was a summing amplifier, which converted the transduced electrical resistance into DC voltages and boosted them proportional to absolute temperature. The thermometer also contained filters, which attenuated all signal information greater than 1Hz, for the rejection of static electricity and other forms of higher frequency electrical interference. A Yellow Springs Instrument temperature probe was used with the thermometer. At the tip of the temperature probe was an epoxy-coated precision linear thermistor, which served as the temperature sensor (Autogenic Systems Incorporated, 1976a). Micropore tape was used to attach the temperature probe to the middle finger.

An Autogen 5100 digital integrator was used to compute average skin temperature in degrees Fahrenheit, over the selected time intervals, and provide the data on a digital readout. The Autogen 2000 was connected to the Autogen 5100 using a standard RCA phono cable.

# CHAPTER IV

## FINDINGS AND CONCLUSIONS

Basically, Chapter IV constitutes a restatement of the hypotheses presented in Chapter II, together with a presentation of the related findings and conclusions. In order to test the hypothesized effects of the different types of relaxation training, a one way analysis of variance (Ferguson, 1971, p. 216) and the Scheffé test (Ferguson, 1971, p. 270) were applied to the data of both post-treatment sessions. Prior to testing the specific hypotheses, a one way analysis of variance and the Hartley test (Winer, 1971, p. 206) were used to examine the pretreatment data.

TABLE 1

SUMMARY OF PRETREATMENT DATA (F)

| GROUP | MEAN | S.D. | N |
|---|---|---|---|
| 1. Quieting Response | 91.92 | 4.68 | 20 |
| 2. Guided Fantasy | 92.34 | 3.50 | 20 |
| 3. Control Group | 91.13 | 5.72 | 20 |

Table 1 shows the means and standard deviations of the pretreatment scores for the three groups.

With reference to Table 2, a one way analysis of variance indicated that there was no significant differences between the pretreatment means of the three groups ($F = 0.34$, $p > .05$). In addition, the Hartley test showed that homogeneity of variance existed between the three groups ($F = 2.66$, $p > .05$).

TABLE 2

PRETREATMENT ANALYSIS OF VARIANCE

| SOURCE OF VARIATION | SUM OF SQUARES | DEGREES OF FREEDOM | VARIANCE ESTIMATE | F |
|---|---|---|---|---|
| Between | 14.94 | 2 | 7.47 | |
| Within | 1270.57 | 57 | 22.29 | 0.34 |

Before testing the major hypotheses, a summary of the first post-treatment data will be made. Table 3 shows the means and standard deviations of the first post-treatment finger temperature scores for the three groups.

TABLE 3

SUMMARY OF FIRST POST-TREATMENT DATA (F°)

| GROUP | MEAN | S.D. | N |
|---|---|---|---|
| 1. Quieting Response | 92.10 | 4.84 | 20 |
| 2. Guided Fantasy | 95.57 | 2.41 | 20 |
| 3. Control Group | 91.33 | 5.14 | 20 |

The analysis of variance illustrated in Table 4 shows a significant difference between the first post-treatment means of the three groups ($F = 5.49$, $p < .01$).

TABLE 4

FIRST POST-TREATMENT ANALYSIS OF VARIANCE

| SOURCE OF VARIATION | SUM OF SQUARES | DEGREES OF FREEDOM | VARIANCE ESTIMATE | F |
|---|---|---|---|---|
| Between | 203.61 | 2 | 101.80 | |
| Within | 1057.53 | 57 | 18.55 | 5.49 |

TABLE 5

SUMMARY OF DIFFERENCES BETWEEN PAIRED GROUP MEANS

| COMPARISON GROUPS | FIRST POST-TREATMENT F | p |
|---|---|---|
| 1 & 3 | 0.32 | |
| 2 & 3 | 9.67 | < .01 |
| 2 & 1 | 6.47 | < .05 |

| COMPARISON GROUPS | SECOND POST-TREATMENT F | p |
|---|---|---|
| 1 & 3 | 0.09 | |
| 2 & 3 | 7.61 | < .05 |
| 2 & 1 | 6.05 | |

NOTE: (1) Quieting response group
(2) Guided fantasy group
(3) Control group

## HYPOTHESIS 1

The quieting response group (1) will exhibit higher finger temperatures than the control group (3) after the treatment sessions.

Findings

Referring to Table 5 the Scheffé test illustrated that there was no significant difference between the first post-treatment means of the quieting response group and the control group ($F = 0.32$, $p > .05$).

Conclusion

On the basis of this analysis, hypothesis 1 must be rejected.

## HYPOTHESIS 2

The guided fantasy group (2) will exhibit higher finger temperatures than the control group (3) after the treatment sessions.

Findings

As Table 5 illustrates, there was a significant difference between the first-post treatment means of the guided fantasy group and the control group. ($F = 9.67$, $p < .01$).

Conclusion

Statistical analysis of the data confirmed that the guided fantasy group, in contrast with the control group, demonstrated a higher finger temperature.

## HYPOTHESIS 3

The guided fantasy group (2) will exhibit higher finger temperatures than the quieting response group (1) after the treatment sessions.

Findings

Table 5 shows there was a significant difference between the first post-treatment means of the guided fantasy group and the quieting response group ($F = 6.47$, $p < .05$).

Conclusion

The conclusion warranted on the basis of this analysis is that the guided fantasy group, in comparison with the quieting response group, evidenced a significantly higher finger temperature after the treatment sessions.

## HYPOTHESIS 4

Both the quieting response group (1) and the guided fantasy group (2) will exhibit an increase in finger temperature which will be maintained one week after the first post-treatment session.

Findings

Table 6 shows the means and the standard deviations of the second post-treatment scores for the three groups.

TABLE 6

SUMMARY OF SECOND POST-TREATMENT DATA (F°)

| GROUP | MEAN | S.D. | N |
|---|---|---|---|
| 1. Quieting Response | 91.82 | 4.58 | 20 |
| 2. Guided Fantasy | 95.08 | 2.23 | 20 |
| 3. Control Group | 91.43 | 5.15 | 20 |

Table 7 shows a one way analysis of variance for the second post-treatment means of the three groups. It shows that there was a significant difference between the three groups ($F = 4.58$, $p < .01$).

TABLE 7

SECOND POST-TREATMENT ANALYSIS OF VARIANCE

| SOURCE OF VARIATION | SUM OF SQUARES | DEGREES OF FREEDOM | VARIANCE ESTIMATE | F |
|---|---|---|---|---|
| Between | 160.22 | 2 | 80.11 | |
| Within | 996.37 | 57 | 17.48 | 4.58 |

Conclusion

With reference to Table 5 the Scheffé tests indicated that only the guided fantasy group, in relation to the control group, was successful in maintaining a significant difference one week after the first post-treatment session. Therefore, this hypothesis was rejected.

## CONCLUSIONS

In summary, hypothesis 1, that the quieting response group will exhibit higher finger temperatures than the control group after the treatment sessions, was rejected. Hypothesis 2, that the guided fantasy group will exhibit higher finger temperatures than the control group after the treatment sessions, was supported. Hypothesis 3, which stated that the guided fantasy group will exhibit higher finger temperatures than the quieting response group after the treatment sessions, was also supported. However, hypothesis 4, that both the quieting response group and the guided fantasy group will exhibit an increase in finger temperature which will be maintained one week after the first post-treatment session, was rejected.

The results of this study suggest that, as a consequence of training, the guided fantasy group subsequently demonstrated higher levels of finger temperature than did the quieting

response group. Therefore, support is lent to the basic hypothesis that guided fantasy is a more effective type of relaxation training for children than relaxation training based on the quieting response strategy.

# CHAPTER V

## DISCUSSION AND IMPLICATIONS

The primary objective of this research was to investigate the relative effectiveness of different types of relaxation training with children. More specifically, the current study sought to compare the effectiveness of quieting response training and guided fantasy training. In Chapter V, the results are discussed both in relation to the objectives of this study and in terms of some of the theoretical and practical issues. Following the discussion, a number of research and educational implications are outlined.

### DISCUSSION

The results of this study indicate that it is possible to teach children relaxation skills, which Brown (1974), Budzynski (1973), Haugen et. al. (1958), and Humphrey and Humphrey (1981), consider to be a preventive measure against psychosomatic and emotional disorders. However, while the current study cannot resolve the question regarding the protective value of early relaxation training, it does suggest the viability of research designed to investigate the long term effects of training children in relaxation.

Quieting response relaxation training as an effective strategy for children

As noted in Chapter II, it is frequently assumed that quieting response relaxation training is effective in terms of stress reduction. In the present study, it was hypothesized that the quieting response strategy would increase finger temperature, thereby indicating a reduction in psychological and physiological arousal. Contrary to prediction, the findings suggested that quieting response training did not affect finger temperature significantly, and therefore, would not be considered an effective relaxation strategy. This finding was somewhat surprising, in view of the claim that children acquire the quieting response skills faster and with greater ease than do adults (Stroebel, 1984a). Previous research with the quieting response program has proven to be successful with children. Most of these studies, however, were based on adapted versions rather than the original format of the Kiddie QR program. For example Fisher and Peper (1984) had children develop their own images or "body friends". A further study by Fisher and Peper (1985) included the use of biofeedback training and awareness tools such as puppets, drawings, and movement. These added components made the quieting response abstractions more concrete for the young child.

One of the major difficulties found in the present study, in terms of the quieting response program, dealt with the abstract

nature of the imagery. Stroebel suggested that young children have to build an abstract fantasy image from a concrete image or experience, thus, if a youngster has difficulty in imaging, build from the known concrete to the abstract (personal communication, 1985). The difficulty, however, was not in the children's ability to image, but rather the ability to image the specifics of the program such as; the magic jaw string and breathing holes in the feet. Evidence of this was illustrated by the lack of hand and body movement in relation to the instructions on the tape recordings.

As previously noted, the children had difficulty switching from the image of QR as a body friend to QR as a skill. QR is presented as a friend who lives inside the child's body. "QR does his QR to make himself feel good (Stroebel, Stroebel, & Holland, 1980, p. 5). This paradoxical statement presented to the children caused some confusion. QR (the body friend) has a number of tricks (such as the QR skill) to make the children feel good when they get worried, or afraid, or mad. After the first session one young boy asked, "How come QR is fooling us?" I asked him to clarify what he meant. He responded, "Well, tricks are to fool people and that's what QR's got". It may be interesting to note that this young boy's finger temperature dropped dramatically at the end of the treatment sessions.

Previous studies using the quieting response program with adults have proven to be of significant value in managing

stress (Ford, Stroebel, Strong, & Szarek, 1982, 1983). These studies were longitudinal which allowed for more practice and a longer treatment period to indicate significant results. Fisher and Peper (1985) also used a longitudinal study incorporating strategies by which the children could practice the QR skills. Stroebel (1984a) advocates regular practice of the quieting response skills. None of the subjects in the present study were asked to practice their relaxation skills, and, in the absence of any incentive to do so, it is conjecturally possible that practice did not occur. Stroebel (1982) also indicated that sufficient time must be given to the program for maximum results. Stroebel stated "do not get discouraged if you don't see any results right away. At first these changes will be small and may often go unnoticed (personal communication, 1985)." Traditional relaxation implies that there will be changes within the autonomic nervous system (Pelletier, 1977; Stovya & Budzynski, 1974). The children in the present study may not have been sufficiently relaxed to produce these autonomic changes from sympathetic to parasympathetic dominance. Ford, Stroebel, Strong, and Szarek (1982) found that the critical factors in predicting the success of adults in the quieting response program were dedication, discipline, and motivation. There was no reinforcement of the newly acquired skills in this study which is necessary for the concepts to generalize to everyday situations (Lupin, 1977;

Stroebel, 1982). Further research over an extended period of time, in conjunction with a reinforcement plan to aid transference, is warranted.

Guided fantasy relaxation training as an effective strategy for children

As previously noted, there have been no studies in the area of guided fantasy as a general relaxation training technique. However, based on a pilot study and research in the area of progressive relaxation (Bernstein & Borkovec, 1973; Jacobson, 1938; Wolpe, 1958) and guided imagery (Brown, 1980; Danskin & Crow, 1981; Green & Green, 1978; Lupin, 1977) it was assumed that guided fantasy training would be effective as a general relaxation training strategy. In the current study, therefore, it was hypothesized that guided fantasy training would significantly influence finger temperature. As predicted, the findings of this study lend support to this hypothesis that the guided fantasy training is a more effective type of relaxation training for children than the quieting response strategy. During both post-treatment sessions, the guided fantasy group demonstrated significantly higher finger temperatures than the quieting response group. The superiority of the guided fantasy relaxation training is consistent with the idea that the combination of progressive relaxation and imagery result in a quiet mind and a

quiet body (Green, 1984; Jacobson, 1967).

Although the difference between the second post-treatment means of the guided fantasy group and control group was significant at the .05 level, in terms of finger temperature, the tendency was in the direction of a diminishing difference. These observations lead to the conclusion that some deterioration of the skills, acquired by the training, occurred during the period between the first and last post-treatment sessions. In this regard, it is possible that a larger number of training sessions may have resulted in enhanced skill attainment, thereby promoting better skill retention.

## IMPLICATIONS

### Research implications

A number of implications for further research with children are suggested by the preceding discussion.

1. Research designed to evaluate the long term effects of early training in relaxation appears to be both a necessary and significant undertaking.
2. Further research conducted to determine the number and frequency of training sessions for optimal skill attainment, and the effects of different training schedules on both short and long term skill retention, would also be of practical interest to

clinicians and investigators in the area of relaxation training.

3. The biofeedback instruments can be used to teach elements of self-regulation and add to the training effect.
4. An adapted version of the Kiddie QR program could be researched as to its effectiveness as a relaxation strategy. The children could be taught to trigger individualized imagery so that they can adapt the concepts of Kiddie QR to create their own "body friends".
5. An analysis of the children's drawings could be used as a resource by counselors, therapists, or clinicians in attempting to understand the children's mental attitudes during the relaxation training process.
6. Further research to investigate the effects of daily practice and reinforcement may prove to enhance the effectiveness of these training programs.

Educational implications

For the educator, the results of the present study entail the following practical implications:

1. The guided fantasy relaxation training would appear to be effective as a general relaxation training strategy for school children.
2. Quieting response relaxation training should not be construed to be an effective strategy for use with Kindergarten children, until such capacity has been demonstrated.

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# APPENDICES

A. Transcript of No Relaxation Training Tape Recording

"The instructions you hear through your earphones will help you relax. Do not go to sleep, but keep your attention on what you are told to do. Your task during this period will be to relax as completely as you can. I repeat, your task during this period is to relax as completely as you can."

B. Quieting Response Training Tape Recording Reference

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C. Guided Fantasy Training Tape Recording Reference

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